Pacific Packet Radio Society Newsletter
June 1988

PPRS Meeting announcement:

The June 7 meeting will feature **HARDWARE NIGHT**. Any speakers will be announced at the meeting. PPRS meets the first Tuesday of the month at 7:30 pm at the Ampex Cafeteria, 411 Broadway, Redwood City. Please come and bring your latest or oldest hardware and software to show-off. Leadership: Glenn, AA6ER, President. Dave, N6KL, interim Vice President. Bill, WA6FSP, Treasurer. Chris, N6RAL, Secretary. Mike, KI6AP, Newsletter.

ATARI:

From: N6MXG @ N6YN

Hello my name is Dan, my QTH is Porterville, CA. I have a semi-split screen program available for the Atari. It is V3.0 of the Express 850 software. It has several new features. A two line edit window at the bottom for transmitted text. Also has an improved xmodem mode. A free copy is available from me but I do ask that you send me a disk and disk mailer with 65 cents return postage. Due to the numerous response I will get I cannot afford to supply all the postage. But I'll be more than happy to run you off a copy of the program free of charge. Disk mailers without the correct amount of postage to make the return trip cannot be returned. I am doing this as a courtesy to all Atari users. 73 Dan N6MXG @ N6YN

Anyone who might have a split screen terminal program for the Atari (400 - 130xe) that could be used for packet, I would like to have a copy of it. I will provide the disk and postage paid mailer. Drop me a message at n6hav or at n6yn. Westnet mail also to n6mxg @ n6hav or n6mxg @ n6yn

DOD defends 220 Mhz

From: W6CUS @ W6CUS

Packet Radio Considered by Dept. of Defense to be Significant Factor in Saving the 220 MHZ Band for Amateur Radio! The following is an excerpt from "The ARRL Letter" May 13, 1988.

"...the Department of Defense (DoD) has filed reply comments strongly supportimg Amateur Radio to the late filed UPS comments in Docket 87-14, the FCC proposal to take away two megahertz from the amateur 220 MHz band.

Calling the UPS proposal seriously flawed, the DoD said that any relocation of the 220 to 222 MHz band would displace amateur packet networks and other data links which could not be reaccommodated in other amateur bands. More details will appear in the next *ARRL Letter* and in the July QST.

MFJ 1274/1.1.5

From: WA4PHY @ WA4PHY

Just thought I'd pass along an interesting tidbit. I just installed the firmware version 1.1.5 in my 1274, and it definately made a big difference over the 1.1.3 version. One of the mose significant improvements immediately noticable, is the capture time..eg., time required to capture the frequency after it last hears activity. This fact alone, makes it well worth the 14 or so dollars it cost. I highly recommend anyone using the 1.1.3 software to get their hands on the 1.1.5.

Other fixes include the HDLC transmitter timeout fix, and the fix of DWAIT parameter. A few new commands have been added which would be useful to bbs operators, such as BBSMSGS, and a new health group instruction.

In the congestion of HF and high density VHF operation, throughput should be noticably increased. Sam

NET/ROM Funny Nodes:

From: N6RQR @ WA6[illegible]WE

Being the one to send and make the response to "No-Call" NET/ROMs public, I can't believe how well the pbbs system works and I can't believe how much people read only what they want to read, and then comment totally out of context. Half of the responses thought I wrote it. But I started it by making the message public so I guess I should try to end it.

First, a nodes call sign on a listing does not NOT have to be the nodes ID as long as the digipeater ID's locally, that is what the call to the FCC was about. Could you imagine all the linked repeaters (like the Condor) sending ID's up and down the link every 10 minutes.

Second, I quote. "The FCC has bestowed on us our own enforcement so we should take the necessary action as soon as possible." This is true for FCC rules and regulations. I don't think illegal software or speeding is in the FCC rules and regulations. I'm not endorsing illegal software or speeding; lets just stay in our boundaries.

Third, I quote. "These guys are all running NET/ROM Version 1.3. That has been verified and I publicly challenge any of them to prove me wrong. That to me is theft in my book and the fact still remains that they are not choosing to identify their nodes with a valid call sign." When I buy software and want to change it, I should have that right as long as I don't give or sell that software to anyone else, this is OK with all the software I own; I'm thinking of buying NET/ROM and asking Software 2000 change my node name to a more descriptive name, if they say no, I'll just wait till the PD clones come out in the next few months. There are probably "Valid" node names NET/ROMs that are pirated also being used by all of us. NOW WHAT DO WE DO?

I could go on but I'm getting a little tired of "PACKET WARS" and would like to go back to just enjoying some really fine QSOs on packet and ignore the wars. Show me one of those "Packet Cops" that does not have at least one "Pirated" software or has not paid for a public domain software that they are using and I, as old Cal says "will stand on my head and eat a bug". I'm not endorsing illegal software, lets not be so HYPOCRITICAL, the Bakers and Swaggarts are doing enough of that. "Less filling" (not bad n6qqq) 73s Ted

From: W0RLI @ W0RLI

I'm looking for the call signs, names, and addresses of the trustees and control operators of the following NET/ROM nodes. Can anyone help? **BIH:BISH0P, GPK:AK7B/R, RENO:TAH0E.** If you prefer not to send this info via packet, you can contact me by phone in the evenings. Any help would be appreciated. These calls are not in my call book and are unknown to the FCC. Hank

From: WD6CMU @ WD6CMU

On April 23rd, the Northern California Packet Association entertained and passed a resolution stating that it considered it good amateur practice that the identifier of a packet network node consist, at least in part, of the call sign of the node trustee or operator and the NCPA encourages node operators to follow this practice. Eric Williams, WD6CMU, Director, NCPA

From: W0RLI @ W0RLI

Reply to way-off-base message from wa6bzs, which took me to task for requesting information on the non-call sign NET/ROM nodes. I had interesting conversations with many different people; Software 2000, the FCC, the ARRL, NARC, and with many of the HF BBS sysops. This occurred over the past 4 months. Then I went and looked more carefully at part 97. Then I thought a bit about the "self policing" nature of ham radio.

I asked the "obvious" questions: are these legal? ethical? desirable? is there anything like this in your area? has anyone questioned them before? Now I am asking a very simple question. Are the trustees and control operators of these stations willing to come forward and identify themselves? Are they willing to explain what they are doing and why? If they are, then everyone will know what is going on. If they are not, then the next step is to get them OFF THE AIR. We do not need unlicensed "CB" type operation on the ham bands. I question the legality of the licenses and operation of these stations. I'm not playing "god", I'm playing "good ham". Hank

From: NU6B @ WB6DAO

I have received some new information which warrants distribution. It was pointed out that a packet station need not have their address be the same as their call sign. So long as they choose to fulfill the identification requirements in some other way, I can not dispute their "legality". I was also advised to make a distinction between unlawful operation and LID operation. I have made some tests of the nodes which do not display amateur call signs. Since the nodes operators by reason of untraceable calls, can not be contacted for comment, I will describe the results of my unofficial tests.

I have connected to S0CAL, BISH0P, and TAH0E. These "nodes" are not NET/ROM and seem to have no function in the network. After getting a connect, the only response to any normal NET/ROM command is a long series of control L characters. Furthermore, none of these node's neighbors are using them for any routing that I can tell. I think that these stations only purpose is to add those cute addresses to everyones node lists. The reason for this escapes me. If anyone out there knows the reason I would be glad to hear it.

Packet radio works best when all the players work together. I have invested much of my time being involved with SBARC's contribution to the packet radio service. An important part of this is to maintain contact with the sysops of the nodes in my area. The K6TZ group must work in harmony with our neighbors. To do this I must know who is in charge of operations for those nodes. When nodes use a traceable call sign for an address, it is possible to have a chat with the control operators and coordinate the efficient operation of the entire system. They need to know what we are planning and we need to know what they are planning. This greatly improves the quality of the entire network as well as helps us to best use our limited resources.

While I agree that a call sign need not be the station address, I strongly believe that stations which show up in the Networks routing tables, have a responsible party who may be contacted. A lot of people have invested time and resources in an attempt to build a smooth running digital communications system. Let's all try to work together. Stations which show up in the routing tables of the network should be making a contribution to the system to justify their taking up RAM in other nodes. Since the aforementioned stations can not be contacted due to their anonymous nature, the rest of us have no way of knowing what their intentions are. At best, their contribution to the system is minimized. And at worst, may be having harmful effects on the network.

I suggest that the amateurs in the locales of questionable operations determine who these operators are and find out what their operation is all about. Persons who contribute to amateur radio are proud of their efforts and should not mind such an inquiry. If these stations are not contributing to the networks to which they belong, they should cause their stations to disappear from the nodes tables. Since they can change their pseudo calls at will, locking them out will only afford a temporary solution. If what we are seeing here is an example of a "LID" operation, their practice may be thought of as willful interference and treated as such.

Because I have not observed these stations direct, I have no way of evaluating the contribution these stations are making to packet radio. Calls of that nature are best made by stations who are in a position to directly observe the operations of the suspect stations. Information obtained from sources able to monitor the S0CAL node have reported that "node" to be located at a low level and making no contribution to the network. 73s...

From: WA6TLW @ WA6NWE

The following information may be hazardous to your relationships with the "packet police" and the "packet censors". But in the spirit of freedom of information, I present this for what it is: *There followed a description of NETROM identifying address locations, data types, etc. Examples were supplied.*

This procedure has been used for some time and has withstood the challenges of the "PACKET POLICE" and their formal complaints to the FCC. Although use of this information will make the sacred node list look different, I really doubt that it can be considered as serious as AIDS or the drought in the western US. Possibly even the sacred node list will evolve into something useful, like a geographical map, rather than simply a list of FCC transmitter IDs whose only use is to flaunt who paid $65.00 in order to advertise a commercial product on ham radio. A call sign, a transmitter identification, is the same as the license plate on a vehicle. People take pride in achievement, but pride in an identification is misdirected. If this information is heretical, then brand me as a heretic. All my transmitters that operate under the provisions of FCC part 97.84 identify as WA6TLW.

NET/ROM rework into THENET

From: WD4NMQ @ WX4S via uucp (Gerard, PA0GRI)

The german group 'studied' the 1.3 release of netrom and coded their findings into C. They really took it apart and made some changes and new features to it. That is no theft to me. To the TNC2 design, they used the roms (including content with the blessing of everyone except those selling TNCs.) The board does not even look to the original TNC board although there is a little resemblance: The Holes. They are a mere copy. But then did the tnc designers have the original plans for them? I expect the C sources in a few days and can forward them to the USA. Regards, gerard.

NET/ROM Illegal in VK

From: WB7DCH @ AX4BBS

I Have a copy of a letter from DOTC dated 20th April 1988 the last paragraph of which reads and I quote: "In summary the Department is not prepared to allow, even for trial purposes, experimentation with NETROM packet radio networking system whilst it does not..." *I wonder what the item was that caused the denial.* [Ed]. A copy of the complete letter is in my hands if it should be required. In other words use of NetRom within VK is illegal. Regards, Brian

PACKET radio via phone

From: N6RQR @ WA6NWE

We now have a Packet door running on RBBS-PC in Sacramento.The idea is two fold modem (phone), exit the bbs to a program with simple commands to the TNC. The idea is to let hams who have not used packet but have a phone modem to try it. and to let non ham users look at the exciting world of packet and try it out while I'm there watching, (Daytime only). So if you see the call N6RQR-10 or unproto RBBSPC on .05 (for now) you will know is most likely someone new to packet. Please be kind. I know people who can read this have no need for using it, but if you let your friends know they might enjoy it.

BBS Info: Biz_Net Phone No. 916-725-5510 24 Hrs 300/1200/2400b N-8-1 (important). The new users will have to leave me a comment or message that they are interested in packet, and if a ham, use your call for the password at first. Thanks, Ted N6RQR @ WA6NWE.

Cooperation

From: W0RLI @ W0RLI

During the past two weeks, I have gotten a number of messages from various NORCAL BBS sysops explaining how "uncooperative" I am being. These are in response to several things:

1) MRYBAY has been dropped from the NCNET/NORCAL/AMSAT, etc. distribution. I asked the question; Why?

2) Although there has been a sysops meeting, there has been no report of what happened there. Some of us could not attend, others chose not to. We still need to know what is happening.

3) Some BBS have gone off the air, others have QSYed. Mostly this has happened with no notice at all.

4) The BID distribution system does not appear to be working. The reason is obvious; some BBS remove the BID or do not recognize it. They should.

In each case I am raising issues that need to be addressed. They are NOT being addressed by any existing forum. I question the status quo, I think we need to advance instead of remaining in one place forever. We do not advance. The network breaks. It is not repaired. Messages arrive claiming that things are fixed. They clearly are not, since they continue to fail. I am willing to cooperate by providing the software and the original concept that makes this all possible. In return, I expect the folks that run the local network to take part in experiments, to try new things, and to provide feedback. ...Hank

9600 BPS MODEM

Relayed from COMPUSERV's HAMNET and courtesy of Scott, W3VS, Roy, AA4RE, and the Garlic Valley Packet Society. Sb: New 9600 BPS modem I. Fm: Bob McGwier N4HY 74615,1366. The following is a hype that James Miller asked me to upload to all of you. I will be the conduit to James on this one. Send replies to me.

Some of you will know that I have developed a high performance 9600 baud modem for packet radio use via amateur voice-band NBFM radios. The prototype design is ready to be laid out as a PCB. A limited number of boards (20) will be made for evaluation purposes ("beta testing"), and should be in my hands by May 31st.

If you feel you have the necessary skills to be a beta tester, and would like to participate in the evaluation, then please let me know what you have to offer. Being a beta tester means you will receive one or two PCBs at cost, and will be expected to build them up pronto and report back within 28 days with constructive criticism. This will then be incorporated into the production design. It does **not** mean you get a couple of boards, do nothing with them for months, or make a hash of the construction and integration, and then put out nasty semi-literate bulletins about its non-performance, as actually happened with my FO-12 satellite PSK modem. No time-wasters please!

It's not too late to consider "bells and whistles". Let me know if I've forgotten anything! I particularly want to know what receivers you expect to use. Please don't bug me about "progress". Watch for bulletins. Ta.

G3RUH 9600 Baud Modem: Brief Specification Issue 2.1

MODULATION: FM. Audio applied direct to TX varactor. +/- 3 kHz deviation gives RF spectrum 20 kHz wide (-60db). Fits standard channel easily.

TX MODULATOR: 8 bit long digital FIR transversal filter for TX (12 bit optional). Gives "brick-wall" audio characteristic. Typically -6 db at 4800 Hz, -60 db at 7500 Hz. Allows compensation for radio and RX filter (the channel) to achieve perfect RX "eye". Eight filter selections including audio loopback. Output adjustable 0-10v pk-pk.

SCRAMBLER: 17 bit LFSR scrambler. Taps as per K9NG system, and UoSAT-C. Selectable Data or BERT mode.

RX DEMODULATOR: Audio from receiver discriminator, 50mv-10v pk-pk. 3rd order Butterworth filter, 5 kHz. New digital PLL clock recovery circuit with 1/256th bit resolution. Independent un-scrambler. Data detect.

CONNECTIONS: RADIO. TXaudio, Rxaudio, Gnd DIGITAL. TXdata, TXclock (16x bit rate), RXdata, RXclock, Data Carrier Detect, Gnd. TTL levels. Power, Audio and digital connections via 0.1" pads for SIL connectors or direct soldering.

POWER CONSUMPTION: 12v/200ma. 19 ICs including 2 thirsty 2764 Eproms.

SIZE: 160x100mm (single Eurocard) plated through board. Drilled for unwired, optional DIN 41612 connector.

APPLICATION: TNC-2, Tiny-2, BSX-2 etc, PK-87, TNC-220 and any TNC with the above digital interface. Full duplex capability. The only set-up is TXaudio level. Will run speeds other than 9600 baud if some filter capacitors changed. No hard-to-get parts.

AVAILABLITY: From mid July 1988

73 de James G3RUH 1988 May 12 @ 2200 UTC via Bob McGwier N4HY

SpaceNews From: N7FSP @ N4CHV

SpaceNews originates at KD2BD in Wall Township, NJ, and is available on various packet radio bulletin board stations in the North America.

* SOVIET SHUTTLE LAUNCH SOON! *

The ABC news network has announced that based on Soviet sources and various U.S. experts, the opinion is gathering that the Soviet Shuttle will be manned by two cosmonauts and will be launched fairly soon, "Probably just before the Moscow summit", at the end of May.

* HUBBLE MAY BE DELAYED *

Last week I reported that the Hubble space telescope is scheduled to be launched on the fourth of the "new" U.S. Space Shuttle missions. Bob, KC2WZ has informed me that the Hubble launch may be put on hold if predictions of high solar activity come true. High amounts of solar radiation could cause excessive atmospheric drag, which could shorten the telescope's lifetime in orbit. The launch may be delayed until solar radiation decreases, or the telescope may be put into a higher orbit, to reduce the effects of drag. Both the Hubble space telescope and the Galileo probe to Jupiter are due to be launched via space shuttles.

* PHASE 3C NEWS *

The launch of the world's next amateur radio satellite is approaching. Phase 3C will be placed into general operation about one month after launch, depending on the number and timing of in-orbit kick motor burns implemented. A launch information net (ALINS) will provide pre-launch, launch and post-launch coverage of the launch week. Phase 3C's launch date depends on the launch of the V-23 mission, now scheduled for May 17th.

Flight Payload Date Launch Windows

V-23	Intelsat	17May	1) 23:43-23:59, 18May 2) 00:33-00:48, 18May 3) 01:15-01:34
V-22	AMSAT	08Jun	1) 11:12-12:03
"	PANAMSAT	08Jun	2) 13:25-14:44
"	Meteosat P2		

The V-23 launch will be broadcast on SPACENET S1 (120 deg West) on transponder 12.

Pacific Packet Radio Society
P.O. Box 51562
Palo Alto, CA 94303

Henry S Magnuski KA6M
2019 Barbara Drive
Palo Alto, CA 94303